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GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

INDIA WEATHER REVIEW, 1952

ANNUAL SUMMARY

PART B

SNOWFALL

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INDIA WEATHER REVIEW, 1952

ANNUAL SUMMARY

PART B

SNOWFALL

This part contains a summary of the reports of snowfall in the mountain regions to the north of India. These reports are collected by local officers from the local residents, head-men of villages or from travellers who have passed through the region and are then transmitted to this office.

The amount of snowfall is usually measured by finding the depth of undisturbed snow lying on the ground. The measurements are given in feet and inches. At places provided with rain-gauges the snow collected in the gauge is melted and measured as rain and given in inches and cents.

Winter Period, January and February

I—JAMMU AND KASHMIR

Skardu.—No reports were received.

Dras.—January witnessed eight snowfalls, the total depth amounting to 2 ft. at the station and 4 ft. on the higher peaks and ranges. In February, there were heavy snowfalls, the total depth being 6 ft. at the station and 12 ft. on the higher elevations. The accumulation of snow at the end of January and February was 4 ft. and 6 ft. respectively at the station and 6 ft. and 12 ft. respectively on the well-known passes and peaks. Both the snowfall and accumulation were reported to be normal.

Srinagar.—Nine light to moderate falls of snow were observed in January both on the surrounding mountain range Pir Panjal and in the Valley. The depth of each of these falls varied from 2 to 3 feet, the total precipitation of the month as recorded at the central observatory amounted to 3·29″ being above the average by 0·39″. The heaviest fall of January was 1·75″. February witnessed six falls on the surrounding mountain range Pir Panjal and in the Valley. Falls were normal in January and below normal in February. The snow accumulation at the end of the period was below normal.

Kargil.—Snowfall occurred at the station proper as well as on the surrounding mountains on three days in January and on eight days in February. In January, the depth of the falls varied from 2 to 4 inches on the ground and was 2 feet on the higher elevations while February recorded 2 to 6 inches on the ground and 1 to 3 feet on the higher elevations. Snow accumulation on the higher peaks at the end of January and February was 6 and 8 feet respectively and was normal. The falls were below the average.

Sonemarg.—Snow fell on four days in January and on nine days in February. The depth varied from 3″ to 1′ in January and 1″ to 2′ in February. Snow accumulation at the end of January and February was 4′ and 7′ respectively on the ground and 5′ and 9′ on the Zojilla and Nichaney passes. The falls during the period were normal.

Leh.—There were two falls of depth ¼″ and 1″ at the station proper, in January. The depth reached 4″ on the higher elevations. February recorded eight falls with depths varying from ⅛″ to ¾″. Snowfall was below the average for the period.

Gulmarg.—No reports were received.

Gurez.—In January, the total snowfall was ½ inch in the valley proper and 6 ft. on the well-known Rajdhani Peak. February recorded snowfall to a total depth of ¼″. This year, weather was quite unusual as no severe snowstorm occurred. The falls were much below the average.

II—THE PUNJAB (I) (INCLUDING PEPSU AND DELHI)

Chamba (Dalhousie Range).—Snowfall was reported on seven occasions in January. The depth of each of these falls varied from 1″ to 1′ 9″. It snowed on five days in February. The depths varied from 1″ to 8″. Snow accumulation at Kalatope was 4′ 2″ at the end of January and 2′ 8″ at the end of February. The accumulation at Sach and Drati passes at the end of January and February was 21′ and 25′ respectively. The falls were reported to be below the average.

Tissa Range.—January witnessed only one snowfall, the depth of snow at the well-known places varying from 4″ to 2′ 6″ while February recorded four falls with depths varying from 2″ to 2′. Falls were below normal in January and normal in February.

Pangi Range.—January had five and February eight snowfalls to total depths of 2′ and 3′ 5″ respectively. Snowfall for the period was below normal.

Bhandal Range.—Each of the months January and February witnessed two snowfalls with depth of 1′ 8″ and 6½″ respectively. The falls were about the average.

Bhattiyat Range.—Both the months January and February experienced two snowfalls each, the depth of the falls varying from 1′ to 6′ on the passes. Accumulation at the end of the period ranged from 9″ to 1½′. The falls were reported to be normal.

Bharmaur Range.—Report for February only was received. Five intermittent falls with depths varying from 3′ to 6′ on the peaks were observed in this month. The snow line descended to 6,000 ft. The falls were normal.

Chini Range (Mahasu).—There were 6 falls in January and four in February. The depth of the individual falls varied from 1″ to 1′ 3″ amounting to 3′ 3″ and 2′ 4½″ in January and February respectively. Snow accumulation at the end of the period was 2′ 4½″. Falls were below normal.

Mandi.—There were four falls in January on Thachi at an elevation of 6,500 ft. a.s.l. The depth of the falls varied from 2″ to 2′. February witnessed light snowfall towards the end of the month. Accumulations on Shayata Galu and Samahri Dhar (10,000 ft. a.s.l.) varied from 1½′ to 4½′ and 1½′ to 3½′ at the end of January and February respectively.

Kangra.—The following table gives the snowfall and accumulations on the well-known peaks of Kulu and Seraj Tahsils.

Name of Peak	January		February	
	Falls	Accumulation	Falls	Accumulation
	Ft.	Ft.	Ft.	Ft.
Kulu Tahsil.				
Hamta	15	17	10	18
Rohtang	14	15	9	15
Barsai	12	11	9	12
Bhojudher	11	9	8	10
Chanderkhani	10	7	7	8
Lohriachhri	8	6	5	5
Sari	5	3	4	4
Bhubu	4	2¼	3	2
Bashtari	3	1½	2	1½
Mojhag	2	1	1½	½
Seraj Tahsil				
Sirikhand	9	7	3	7½
Raghupur	4½	3	¾	3
Jalori	5	2½	½	2½
Sikirn	4	2½	½	2

Snowfall was slightly above the average.

III—Uttar Pradesh

Garhwal.—January witnessed three falls of moderate intensity with depths varying from 1″ to ½′. There were five heavy falls in February with depths varying from 3″ to 7′. Snowfall was below normal in January and above normal in February.

Tehri Garhwal.—January witnessed eight snowfalls, the depth on high mountains varying from 8″ to 1′. Snow line on the well-known peaks descended to about 6,000 ft. There were no falls in February. The snowfall for the period was below the average.

Almora.—The following table gives the falls during and accumulations at the end of each of the months January and February.

Locality	January	February
	Ft.	Ft.
Falls		
Byans	3 to 4	6 to 7
Malla Danpur	1½ to 2	4 to 6
Chaudans	3	..
Accumulations		
Kotila Hill	1½	4½
Kotila Valley	10 to 12	10 to 12
Kafini Hill	14 to 18	15 to 20
Accumulations—contd.	Ft.	Ft.
Kafini Valley	20 to 25	20 to 30
Bankatia	12 to 18	15 to 20
Pinder Valley	50 to 60	50 to 60
Pinder Peak	250 to 300	250 to 300
Nanda Khat	30 to 45	30 to 45
Sunder Dhunga Valley	35 to 40	35 to 40
Sunder Dhunga Peak	20 to 25	20 to 25
Lipia	4¾	7½
Lipu	3¼	6

Mukteswar.—Each of the months January and February recorded two slight intermittent snowfalls. The maximum depth was 2·5″ in January and 8·0″ in February. The snowfall for the period was below normal.

Hot Weather Period—March to May

I—Jammu and Kashmir

Skardu.— No reports were received.

Dras.—March witnessed unusually heavy falls almost daily. The total depth of snowfall was 9 feet at the station proper and much more on the higher elevations. In April, the total depth of the falls was 6 ft. May recorded five heavy falls the total depth amounting to 6 ft. Snow accumulations on the ground at the end of March and April were nine feet and one foot respectively. Falls were above average in March and May and about average in April.

Srinagar.—In March six light to moderate falls occurred on the surrounding mountain range Pir Panjal, the depth of the falls varying from one to four feet. Two of these were also observed in the valley. Four moderate falls were observed in April, the depth of which varied from 2″ to 5″. There were three falls in May the depth varying from 3″ to 6″. Snowfall for the period was also normal. Accumulation on the surrounding mountain range Pir Panjal was normal.

Kargil.—No report for April was received. Light falls were observed on nine occasions in March. The depths varied from 1 to 4 inches at the station proper and from ½ to 2 ft. on the higher elevations. May witnessed two moderate falls on the surrounding mountain range. These falls also extended to the station proper, where the depth was one inch. Snow accumulation in March was 9 ft. on the mountains and 3 inches on the ground, while in May the depth on the mountains was 4 ft. and no snow existed at the station proper. Snowfall was below average during the period.

Sonemarg.—It snowed on nine occasions in March, the depth varying from 1½″ to 2′. Snowfall during and accumulation at the end of April were 3·3″ and 1½′ respectively. May witnessed a snowfall of depth six inches. On all the above occasions the snow descended over Zojilla and Nichney passes. At the end of March snow accumulated up to 7½ ft. on the ground and 10 ft. on the Zojilla and Nichney passes. Accumulations at the end of April were 1½ ft. and 4 ft. on the ground and on the Zojilla pass respectively. At the end of May accumulation on Zojilla and Nichnay passes was 3 ft. Both snowfall and accumulation were about the average.

eh.—March witnessed five falls varying from flakes ı depth of about 3 inches. Both April and May re-led four falls, each ranging from flakes to a depth : inches. Snowfall was normal in March and April above normal in May.

urez.—The total depth of snowfall for March was On the well-known peak Rajdhani the total depth :hed, was 8′. There were no falls in April. Report May was not received.

I—THE PUNJAB (I) (INCLUDING PEPSU AND DELHI)

hamba (Dalhousie Range).—March recorded three s with depths varying from 2″ to 1½′. No snow-occurred in April. At the end of March no snow ted at Kalatope while it amounted to 1 foot and 15 on Basodhan and Sach Passes respectively. No ort was received for May. Snowfall for March was orted to be below the average.

ıngi Range.—March witnessed twelve falls, the :hs varying from 2″ to 1½′. There were two falls ıpril with depths 4″ and 5″ respectively. May had ınowfall. Falls during the period were reported to ıbove the average.

handal Range.—A snowfall of 2 ft. depth was re-ed in March. No reports were received for the r months.

pper Chamba Range.—Report for March was not ived. Each of the months April and May recorded falls. By the end of April snow accumulations in ani and Bohar passes were 4 to 6 ft. and 3 to 4 ft. ıectively, while for May the corresponding figures e 5 to 6 and 3 to 4 ft. The falls were above nor-in April and May.

harmaur.—In March, it snowed on five occasions depth varying from 1 to 4 ft. while April record-:hree falls with the highest depth being one foot. umulations on well-known passes were as follows :

Name	March	April
	Feet	Feet
i Mahesh	10	6 to 7
ti	15	10 to 11
:hia	16	10 to 11
chho	16	10 to 11

)wfall for the period was above normal. No report May was received.

Iandi.—In this period, only March witnessed snow .s on three occasions. The depth of falls on the well-)wn passes was as follows :—

Locality	Depth of falls	
	Feet	Inch
ırandhi	2	0
tu	1	10
nru Nag	1	8
ıcheot	0	5

lls were above normal in March.

Kangra (Kulu).—Report for March only was receiv-. This month recorded a fall, the depth of which on the well-known peaks and the accumulations at the end of the month were as follows :—

Name of Peak	Falls	Accumulation
	Feet	Feet
Hampta	19	20
Rohteng	17	18
Barsai	15	16
Bhoja Dhar	13	14
Chandarkhani	11	12
Lohri Achri	10	9
Sari	7	7
Bhubu	5	4
Bashtari	3	2½
Mojhag	2	1½

Snowfall was normal for the month.

Mahasu (Chini Range).—There were several falls in March and April, the total depths reaching 5′ 7″ and 1′ 6″ respectively. No falls were observed in May. The falls were heavier than usual in March.

III—UTTAR PRADESH

Garhwal.—Snow fell on thirteen occasions in March, the depths varying from ¼′ to 5′. April recorded snowfall on five days, the depths varying from ¼″ to 2′. Falls were above normal in March and April.

Tehri Garhwal.—March recorded falls on twelve days, the total depth varying from 1′ to 7′ on the higher peaks and elevations. Snowfall for the month was below average. Reports for the other months were not received.

Almora.—The following table gives the snowfall during and accumulations at the end of each month of this period.

Locality	March	April	May
	Feet	Feet	Feet
Snowfall			
Byans	11 to 15	6 to 9	5½ to 8¼
Malla Darma	7½	3	..
Malla Danpur	4 to 8	2½	1/3
Malla Johar	10	..	4 to 5
Accumulations			
Kotila Hill	4 to 8	15 to 20	5
Phurkia	4 to 6	..	..
Kotila Valley	11 to 14	10 to 12	8 to 10
Kafini Hill	17 to 22	15 to 20	12 to 18
Kafini Valley	22 to 32	..	15 to 25
Bankatia Peak	18 to 23	15 to 20	12 to 18
Pinder Valley	55 to 65	50 to 60	45 to 55
Pinder Peak	255 to 310	250 to 300	245 to 295
Nanda Khat	33 to 48	30 to 45	28 to 42
Sunderdhunga Valley	37 to 42	35 to 40	32 to 38
Sunderdhunga Peak	22 to 27	20 to 25	18 to 22
Nebudhara Valley	30	20	..
Lipu	16	6	9
Lipya	24	9	14

Snowfall was above normal in March and April and below normal in May.

Mukteswar.—March witnessed two falls on consecutive days, the depths varying from 1″ to 2″. Snowfall for this month was below average. Reports for the other months were not received.

Monsoon Period—June to September

June and July

I—JAMMU AND KASHMIR

Skardu.—No reports were received.

Dras.—No snowfall occurred at the station proper except on the higher peaks where snowfall was observed in June only. Snow accumulation at the end of June was 3 feet on the surrounding mountains.

Srinagar.—Two light falls were reported on the surrounding mountain range Pir Panjal in June while no falls were recorded in July. The depths of the above falls varied from 3 to 6 inches. Snowfall was within normal in June and below it in July. Accumulation at the end of the period was less than the average.

Kargil.—No fresh snowfall occurred during the period. Previous accumulation on peaks amounted to 2½ ft. at the end of June and was normal. There was no accumulation at the end of July.

Sonemarg.—There was no snowfall during the period. In June, no accumulation was noticed on the ground, but it was estimated to be about 2 ft. on the Zojilla and Nichnay passes. At the end of July, there was no snow accumulation either on the ground or on the passes.

Leh.—There were two falls in the first week of each month of this period. Snowfall and accumulation were reported to be heavier than usual for June. Snowline was around 18,000 ft. on the northern slopes at the end of the period. All the high passes were clear of snow.

Gurez.—There was no fall during the period. Most of the peaks and the passes in the region were practically free from snow of the previous winter.

Gulmarg.—There were several light to moderate falls in June and only one fall in July on the Handibal and Affarwat ranges. The falls during and accumulations at the end of the period were above normal. The character of the falls was said to be abnormal.

II—THE PUNJAB (I) (INCLUDING PEPSU AND DELHI)

Chamba.—(*Dalhousie Range*)—There was a light snowfall on the higher peaks in the first fortnight of June. No snowfall was observed during the rest of the period.

Upper Chamba Range.—One snowfall occurred in the first week of June, the snowline descending to 9,000 ft. In July no snowfall was observed. At the end of the period snow accumulation on Baliam pass (13,000 ft.) was estimated to be 2 to 3 ft. in depth. Falls were reported to be normal.

Bakloh Range.—No snowfall occurred during the period.

Churah Forest Division.—A few light falls of snow with depths varying from 2″ to 10″ were noticed on the high peaks and passes above 12,000 ft. during June. No fall was observed in July. Accumulation on the high peaks varied from 1 ft. to 4 ft. and was less than the average.

Trehta Range.—One snowfall of 1″ was reported in June while no report for July was available. Falls during and accumulation at the end of June were reported to be abnormal.

Kangra.—No report was received.

Kilba.—Falls were generally less when compare those of the previous years.

Mandi.—There had been no snowfall throughou district during the period under report. No accur tion of snow was reported at the end of the peri

III—UTTAR PRADESH

Garhwal.—There were five falls in June on high peaks. The depth of the falls ranged from 1 to 1 ft. In July, no fall was observed. The falls above average in June and below normal in July accumulation of snow was noticed at the end o period.

Almora.—The snowfall during and accumulati the end of each month of the period on the well-k passes and peaks are given in the following table. the falls and snow accumulations were below nc

Locality	June	Ju
	Feet	F
Falls		
Malla Danpur	1/12	
Byans	6 to 9	5
Malla Johar	4	
Accumulations		
Kotila Hills	1/24	
Kotila Valley	8 to 12	7
Kafini Hill	12 to 18	
Kafini Valley	18 to 25	15
Bankatiya Peak	12 to 18	12
Pinder Peak	245 to 290	245
Pinder Valley	45 to 55	45
Nanda Kote	28 to 40	28
Sunderdhunga Peak	20 to 25	15
Sunderdhunga Valley	32 to 42	32
Lipiya	9½	7
Lipu	6	13

August and September

I—JAMMU AND KASHMIR

Skardu.—No reports were received.

Dras.—No fresh snowfall was observed durin period. The depth of the existing snow on the known higher passes was estimated to be 2 ft.

Srinagar.—One light fall in August and three in tember were observed on the Pir Panjal range depth of each of these falls did not exceed 2″. fall and accumulation were said to be below n for August and normal in September.

Gulmarg.—Snow fell once in August and on s occasions in September on the surrounding mou ranges of Handibal and Affarwat. Both the fall accumulations were above normal for the perio

Kargil.—No snowfall occurred during the p The falls and the accumulations were below nor

Sonemarg.—There was no fall during and ac lation at the end of the period.

Leh.—Light snow fell at high elevations above ,000 ft. on two days in each of the months. There as no snow accumulation except on glaciers and the rennial snow fields.

II—THE PUNJAB (I) (INCLUDING PEPSU AND DELHI)

Chamba.—There was no snowfall during the period any of the ranges of the district.

Kangra and Kilba Hills.—No reports were received.

Mandi.—No snowfall was observed throughout the strict during the period.

III—UTTAR PRADESH

Garhwal.—There were three falls during August, e depth of snow varying from 1/8′ to ½′ at 17,000 ft. September, snow fell on 4 occasions the depth rying from ¼′ to 3′ at 14,000 ft. The falls were above rmal during the period.

Almora.—The falls and accumulation of snow in me localities are given below. Both the falls and cumulations were below normal.

Locality	August	September
Falls	Feet	Feet
lla Johar	2	3 to 12
lla Danpur	1½	2
lla Darma	4	4
ns	8 to 13	5 to 7
ndar	..	2
Accumulations		
ila Hills	..	No reports.
ila Valley	$4\frac{5}{12}$	,,
ini Hill	..	,,
ini Valley	5½	,,
katiya	10	,,
der Valley	200 to 400	,,
der Peak	100 to 200	,,
dakhat	15	,,
derdhunga Valley	10 to 15	,,
derdhunga Hill	5 to 10	,,
u	8	,,
iya	13	,,

Post Monsoon Period

October to December

I—JAMMU & KASHMIR

Skardu.—No reports were received.

Dras.—No fall occurred at the station in October, several falls were observed on the surrounding ks and passes. No report for November is avail- e but in December several heavy falls were report- Snow accumulation at the end of the period was ft. on the ground and 3 ft. on the peaks and passes. e falls were normal during the period.

Srinagar.—Only three falls were reported till the ddle of December. In the second half of December, eral light to moderate falls were observed on the Panjal ranges.

Gulmarg.—No reports were received.

Kargil.—October and November each had snowfall on two days in the Nukhtul and Harker mountain peaks. The depth of the individual falls varied from 1½″ to 3½″ in October and ½ ft. to 1 ft. in November. Snow accumulation on the peaks was about 6″ at the end of October and 2 ft. at the end of November. October was considered to be below the average while November far below normal in regard to falls during and accumulations at the end. In December, however, eight falls were noticed on the mountain ranges. On six of these occasions, the falls occurred at the station also. The depth ranged from 2 to 2½ ft. on the mountains and was above 12″ at the station. The total accumulation at the end of the period was reported to be about 3½ ft. on the peaks and about 12″ on the ground. The falls and accumulations were above normal for December.

Sonemarg.—No fall was reported in October. In November, there was one fall of depth 1 to 2 ft. on the Zojilla pass. There were six days of snowfall in December, the depths varying from 1½″ to 14″. The falls were normal in October and November and slightly above normal in December. Snow accumulations at the end of each of the months of the period are given below.

Snow Accumulations

Locality	October	November	December
	Feet	Inches	Feet
Sonemarg	..	4½	3½
Zojilla and Nichnay passes and peaks	..	5	4½

Gurez.—No report was available for October. One fall of depth 1½″ to 3″ on the surrounding valleys and hills was reported in November. There was no fall during the first fortnight of December, but in the second half three falls were experienced in the Rajdhani pass. Snow accumulation at the end of the period was 6½ ft. on the mountains and 3 ft. in the valleys. Falls were normal in November and above normal in December.

Leh.—October experienced 5 snowfalls, one of which was also observed at the station proper to a depth of 1 to 1½″. Only 2 falls were noticed in November and 3 in December. Accumulation at the end of the period was about 2 ft. at 13,000 ft. The falls were normal in October and less during the rest of the period.

II—THE PUNJAB (I) (INCLUDING PEPSU AND DELHI)

Chamba (Dalhousie Range).—No reports were received for October and November. During December, snow fell on 4 days to a maximum depth of 13″. The snowline descended to 6,200 ft. during the month. Snow accumulation at Kalatope was 2½ ft. at the end of December. The falls and accumulation were normal.

Upper Chamba range.—Snowfall was experienced once in October, and twice in November and December. The snowline descended from 11,000 ft. in October to 3,000 ft. in December. Snow accumulation was as follows :—

Locality	October	November	December
	Feet.	Feet.	Feet.
Baliani Pass	..	2 to 3	5 to 7
Bohar pass	..	1 to 2	4 to 6

The falls were above average in the first 2 months and normal in December.

Bhattyat Range.—No fall was experienced in October. Only 3 falls were observed in the rest of the period, one in November and 2 in December. The depth varied from 2″ to 8″. By the end of the period snow accumulation was 3 ft. on Surag Dewar and 2 ft. on Gharam and Khudurada ranges. The falls and accumulation were below average.

Tissa Range.—No reports were received for the months of October and November. 3 falls of snow were reported in December. The depth of the falls ranged from 2″ to 4″. The snowline descended to 5000 ft. Accumulation at Sach pass was estimated at 10 ft. The falls and the accumulations were below average.

Bharmaur.—No report was received for October. One fall was reported in November and 3 in December. Snow accumulation by the end of the period was 7 ft. at the various passes on the Ravi-chanab watershed. The fall was higher in November and about average in December.

Pangi Range.—No report was received for October. November experienced three falls of depth ½″ to 1″ in the Kilar range station. There were also 3 falls in December, the depths varying from 2″ to 1 ft. All the higher peaks and passes were covered with snow at the end of the period. The falls and accumulations were less in November and more in December.

Bhandal Range.—Report for December only was received. Two falls of depth 3/5″ and 3/10″ were observed in this month. The month was considered to be above normal as far as the falls and accumulations were concerned.

Mandi.—No fall occurred in October and November while two falls were observed in December. Most of the well known passes in the area were covered with snow to a depth of about 2 ft. On the peaks of the region, the depth varied from 2 to 4 ft. The fall was above average in December.

Mahasu.—The reports for many places in this region were only for December. In the Chinirange, there were 4 falls with a total depth of nearly 2 ft. In the Chopal region, one fall was reported. The depth of snow at various stations in this area ranged from 1½″ to 14″. No pass was however blocked. In the Kilba Kailash Range, one fall was reported and all passes were under snow. The falls and accumulations were generally above average in most places.

III—Uttar Pradesh

Garhwal.—Two falls of snow with depth ranging from ¼″ to 8′ were observed in October. No fall was reported in November but 2 falls were experienced in December.

Tehri Garhwal.—No report for October was received. One fall was observed in November and 4 in December. The depth of snow was 1 to 2 ft. at the end of November and 1 to 8 ft. at the end of December. The snowline was at about 5,000 ft. in December. The falls were below average during this period.

Almora.—No report for October was received. The falls and accumulations for November and December in the various passes and hills are given below. The falls were less both in November and December.

Locality	November	December
Falls	Feet	Feet
Malla Johar	3	..
Malla Danpur	4	3 to 5
Byans	5 to 7	¾
Malla Darma	..	1½
Chaudans	..	½
Accumulations		
Kotila Hill	4	2
Kotila Valley	9	8
Kafini Hill	..	10
Kafini Valley	16	15
Bankatiya Peak	16	12
Pinder Peak	31	200
Pinder Valley	..	40
Nanda Khat	22	25
Devali	4	
Sunderdhunga Peak	16	15
Sunderdhunga Valley	18	30
Lipiya	15	10
Lipu	10	7
Monsooria Peak	..	5
Nawaidhara	..	10

IV—Assam

No report was received from the Sadiya Fi tract, Abor Hills and the Baliapara Frontier tr

Summary

Winter Period, January and February

Snowfall during the period was below nor Jammu and Kashmir, about normal in the Pun and slightly below normal in the Uttar Pradesh. accumulation was about normal in the Punjab Jammu and Kashmir.

Hot Weather Period, March to May

Snowfall and accumulation were about aver Jammu and Kashmir, slightly above normal i Punjab(I) and about normal in the Uttar Prad

Monsoon Period, June and July

Snowfall and accumulation during this perio normal in Jammu and Kashmir, but below ave the Punjab (I) and the Uttar Pradesh.

Monsoon Period, August and September

Snowfall was as usual confined to higher ele during this period. The falls and accumula Jammu and Kashmir were normal, but below a in the Punjab (I) and the Uttar Pradesh.

Post Monsoon Period, October to Decembe

Snowfall and accumulation during this peri generally about normal in Jammu and Kashn the Punjab (I) and below normal in the Uttar P

N. B.—It is not possible to adopt a single classification of season which will be satisfactory for the whole of India. The classification adopte publication is, however, considered as the most satisfactory one and the least open to objection especially from the point of view o8

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